

Appl. No. 09/879,451
Amdt. Dated April 14, 2005
Reply to Office action of January 14, 2005
Attorney Docket No. P14638-US1
EUS/J/P/05-3088

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 – 16. (Canceled)

17. (New) A method for dynamic allocation of a circuit pathway between a requesting switch, the requesting switch being one of a pool of switches, and an access node via a media gateway (MGW), comprising the steps of:

contacting a media gateway selection Node (MGWSN) requesting a circuit connection to a target access node;

consulting a Media Gateway Selection Database (MGWSDB) to determine an available circuit pathway between the requesting switch and the target access node, wherein the circuit pathway is identified in the MGWSDB by a Circuit Identity Code (CIC);

selecting one media gateway from among a plurality of media gateways;

reserving the CIC associated with a selected circuit pathway at the one media gateway; and

sending the identity of the MGW and the CIC to the requesting switch.

18. (New) The method of claim 17, wherein the step of contacting a MGWSN further comprises the MGWSN being contacted by the requesting switch, the requesting switch being one Mobile Switching Center (MSC) in a pool of MSCs.

19. (New) The method of claim 18, wherein the MGWSN is adapted to respond to a request for an available circuit pathway to an access node by

accessing the MGWSDB to identify the available circuit pathway between the one MSC and a requested target access node, wherein the target access node is a particular Base Station Controller (BSC) in a group of BSCs.

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20. (New) The method of claim 19, wherein the one MSC is seeking to connect to a mobile terminal that is connected with the particular BSC.

21. (New) The method of claim 19, wherein the MGWSN is a central means of circuit pathway control such that no dedicated circuits are required from the group of BSCs to each MSC in the MSC pool.

22. (New) The method of claim 19, wherein the MGWSDB comprises relationships between the circuit pathways, the circuit identity codes, the plurality of media gateways and the group of BSCs.

23. (New) The method of claim 19, wherein the MGWSN is connected between the pool of MSCs and media gateways, wherein the media gateways connect to the group of BSCs.

24. (New) The method of claim 19, further comprising:
responsive to terminating communications between the one MSC and the particular BSC, the MSC
informing the MGWSN that the call is released and the circuit pathway between the MSC, the media gateway and the particular BSC is released, whereupon the MGWSN updates the MGWSDB regarding the circuit pathway.

25. (New) A node in a telecommunications network for dynamic allocation of a circuit pathway between a requesting switch, and a target access node via a media gateway, the node comprising:

a media gateway selection node (MGWSN) for selecting a circuit pathway between the requesting switch and the target access node, wherein the MGWSN further comprises

means for notifying the requesting switch of the selection and

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means for reserving the selection with a selected media gateway, wherein the circuit pathway includes

the requesting switch, the requesting switch being one of a pool of switches,

the target access node, the target access node being one of a group of access nodes and

the media gateway, being one of a plurality of media gateways; and a media gateway database (MGWSDB), coupled with the MGWSN, for storing circuit identity codes (CIC) necessary to control the allocation of circuit pathways by the MGWSN.

26. (New) The node of claim 25, wherein the MGWSDB further comprises identities of the plurality of media gateways and identities of the group of access nodes.

27. (New) The node of claim 25, wherein the MGWSN is a central control means between the requesting switch and the target access node such that no dedicated circuits from the access nodes to each switch are required.

28. (New) The node of claim 25, wherein the pool of switches is a pool of Mobile Switching Centers (MSCs), the requesting switch being one MSC in a pool of MSCs and the target access node being a particular Base Station Controller (BSC) in a group of BSCs.

29. (New) The node of claim 28, wherein the MGWSN is connected between the pool of MSCs and the plurality of media gateways, wherein the plurality of media gateways connect to the group of BSCs.

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30. (New) An arrangement for dynamic allocation of a circuit pathway between a requesting switch, and a target access node via a media gateway, the arrangement comprising:

- a pool of switches, including the requesting switch;
- a group of access nodes, including the target access node;
- a plurality of media gateways situated between and connected to the group of access nodes;

- a media Gateway Selection Node (MGWSN) for determining an available circuit pathway between the requesting switch and the target access node, wherein the circuit pathway is identified in

- a Media Gateway Selection Database (MGWSDB) by a Circuit Identity Code (CIC), wherein the MGWSN has

- means for accessing the MGWSDB for selecting the media gateway (MGW) from the plurality of MGWs;

- means for reserving the CIC associated with the selected circuit pathway;
- and

- means for sending the identity of the MGW and the CIC to the requesting switch.

31. (New) The arrangement of claim 31, wherein the requesting switch is a requesting mobile switching center (MSC), the pool of switches is a pool of MSCs, the target access node is a target Base Station Controller (BSC) and the group of access nodes is a group of BSCs.

32. (New) The arrangement of claim 32, wherein the MGWSN is adapted to respond to a request for an available circuit pathway to the target BSC by accessing the MGWSDB to select an available circuit pathway between the requesting MSC and the target BSC.

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33. (New) The arrangement of claim 32, wherein the requesting MSC is seeking to connect to a mobile terminal that is coupled with the target BSC.

34. (New) The arrangement of claim 31, wherein the MGWSN is a central means of control such that no dedicated circuits are required from the BSCs to each MSC.

35. (New) The arrangement of claim 32, wherein the MGWSDB comprises relationships between circuit pathways, associated circuit identity codes, media gateways and the group of BSCs.

36. (New) The arrangement of claim 32, wherein the MGWSN is connected between the pool of MSCs and media gateways, wherein the media gateways further connect to the group of BSCs.

37. (New) The arrangement of claim 32, further comprising:
means for informing the MGWSN that the connection between the MSC and the target BSC is terminated, whereupon the circuit pathway between the MSC, the media gateway and the target BSC is released and the MGWSN updates the MGWSDB regarding the status of the circuit pathway.